

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An apparatus comprising:

a pipeline resource having a plurality of address spaces, each of the plurality of address spaces corresponding to one of a plurality of address space identifiers, the pipeline resource including entries each including one of the plurality of address space identifiers, wherein the entries are selectively flushable on an address space basis.

Claim 2 (cancel)

Claim 3 (currently amended): The apparatus of claim [[2]] 1, further comprising a control register coupled to the pipeline resource to provide the plurality of address space identifiers to the entries.

Claim 4 (cancel)

Claim 5 (currently amended): The apparatus of claim [[2]] 1, wherein the entries further include a thread identifier.

Claim 6 (currently amended): The apparatus of claim [[2]] 1, wherein the pipeline resource comprises a translation lookaside buffer.

Claim 7 (original): The apparatus of claim 6, further comprising a filter coupled to the translation lookaside buffer to select at least one of the entries to be flushed.

Claim 8 (currently amended): A method comprising:

associating an address space identifier with a value; ~~and~~

hashing the address space identifier with a portion of the value; and

thereafter storing the value and the address space identifier in a pipeline resource.

Claim 9 (original): The method of claim 8, further comprising storing the value and the address space identifier in an entry of the pipeline resource.

Claim 10 (original): The method of claim 9, further comprising invalidating the entry if an update to the value occurs during a context.

Claim 11 (original): The method of claim 10, further comprising selectively flushing the entry after invalidating the entry.

Claim 12 (original): The method of claim 10, wherein invalidating the entry further comprises invalidating all non-global entries of the pipeline resource.

Claim 13 (original): The method of claim 10, wherein invalidating the entry further comprises invalidating all entries of the pipeline resource associated with the address space identifier.

Claim 14 (original): The method of claim 8, further comprising associating a second address space identifier with a second value; and

storing the second value and the second address space identifier in the pipeline resource.

Claim 15 (cancel)

Claim 16 (currently amended): A system comprising:

a processor including a pipeline resource including a plurality of entries each having one of a plurality of address spaces, each of the plurality of address spaces corresponding to one of a plurality of address space identifiers; and

a hashing engine to hash one of the plurality of address space identifiers with a portion of a value to be stored in one of the entries; and

a dynamic random access memory coupled to the processor.

Claim 17 (original): The system of claim 16, further comprising a control register coupled to the pipeline resource to provide the plurality of address space identifiers to the pipeline resource.

Claims 18 - 19 (cancel)

Claim 20 (currently amended): An article comprising a machine-readable storage medium containing instructions that if executed enable a system to:

associate an address space identifier with a value; and

store the value and the address space identifier in an entry of a pipeline resource; and
flush a portion of the pipeline resource, the portion including the entry and other entries
having the same address space identifier.

Claim 21 (cancel)

Claim 22 (original): The article of claim 20, further comprising instructions that if executed enable the system to store a thread identifier in the entry.

Claim 23 (original): The article of claim 20, further comprising instructions that if executed enable the system to associate a different address space identifier with a second value, the different address space identifier corresponding to a different active context than the address space identifier.

Claim 24 (original): The article of claim 20, further comprising instructions that if executed enable the system to invalidate the entry if the value is updated during a context.

Claim 25 (currently amended): A method comprising:
providing a first address space identifier to a pipeline resource during a first context;
hashing the first address space identifier with at least a portion of a first data value; and
storing the first data value and the first address space identifier in a first entry of the pipeline resource[[:]]

~~providing a second address space identifier to the pipeline resource during a second context; and~~

~~storing the second address space identifier in a second entry of the pipeline resource.~~

Claim 26 (cancel)

Claim 27 (currently amended): The method of claim [[26]] 25, further comprising invalidating the first entry if an update to the first data value occurs during the first context.

Claim 28 (cancel)

Claim 29 (currently amended): The method of claim [[25]] 30, further comprising maintaining the first address space identifier in the first entry during the second context.

Claim 30 (new): The method of claim 25, further comprising:

providing a second address space identifier to the pipeline resource during a second context; and

storing the second address space identifier in a second entry of the pipeline resource.

Claim 31 (new): The system of claim 16, further comprising a filter coupled to the pipeline resource to flush the entries of one of the plurality of address spaces while the entries of the missing address spaces are maintained in the pipeline resource.

Claim 32 (new): The article of claim 24, further comprising instructions that if executed enable the system to flush the portion of the pipeline resource on a next context switch after the invalidation.

Claim 33 (new): The method of claim 27, further comprising flushing a portion of the pipeline resource associated with the first address space identifier after invalidating the first entry.